

Notice of Allowability

Application No:

10/727,113

Examiner

Marisol Figueroa

Applicant(s)

ZHENGDI, QIN

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's amendment filed on 10/06/2006.
2. ☒ The allowed claim(s) is/are 5-12 and 19.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Andrew T. Hyman on January 8, 2007.

2. The application has been amended as follows:

Claim 5 (Currently Amended) A method comprising:
estimating a delay of a signal received at a mobile station from a specific network element of a network within a search window; and

determining said search window based on location information available for said specific network element and based on a known distance of said mobile station to at least one other network element,

wherein said at least one other network element comprises at least two network elements, to which a respective distance was already determined based on delay measurements on signals from said at least two network elements, ~~and~~

wherein said search window is selected such that it covers intersection points of all circles around said at least two network elements with a radius of the respectively determined distance, and
wherein said search window is used to determine the location of said mobile station.

Reasons for Allowance

3. **Claims 5-12, and 19** (*renumbered as 1-9, respectively*) are allowed.

4. The following is an examiner's statement of reasons for allowance:

Claim 5 is allowed because the closest prior art, KUWAHARA (EP 1,164,383 A2), either singularly or in combination, fails to anticipate or render obvious the features of wherein a search window is selected such that it covers intersection points of all circles around said at least two network elements with a radius of the respectively determined distance.

Claims 12 and 19 are allowed because the closest prior art, KUWAHARA (EP 1,164,383 A2) in view of CHEN et al. (US 6,748,224), either singularly or in combination, fail to anticipate or render obvious the features of wherein a search window is subdivided into at least two-sub-windows, each covering a respective intersection point.

Claims 6-11 are allowed as being dependent upon independent claims that have been allowed.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Prior Art of Record

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) BEN-ELI (US 2003/0134652 A1) - Method and apparatus for searching for a base station using an adaptable search window.

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(b) MERSON et al. (US 2003/0176189 A1) – Wireless Communications handoff method and system employing such.

(c) TANG et al. (US 7,065,369 B2) – Method of location and measuring a mobile station.


(d) KUWAHARA et al. (US 2001/0051527 A1)- Wireless position measurement terminal and wireless position measurement system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marisol Figueroa whose telephone number is (571) 272-7840. The examiner can normally be reached on Monday Thru Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Marisol Figueroa
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LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER